## **ABSTRACT**

Disclosed is a method according to which a first oxygen sensor (21) is disposed on the exhaust pipe upstream from a nitrogen oxide trap (18), and the development of a meaningful signal that is representative of the signal (3,4) supplied by said sensor is monitored. A substantial increase (34, 44) of said meaningful signal, which is obtained following a variation (31, 41) resulting from the motor being switched from running on a lean mixture to running on a rich mixture, from a first plate (32, 42) having an essentially constant level is used as an indicator for controlling the end of the purge process. The invention applies to diesel engines